

## CONFIRMATORY LICENSE

**Title:** CHROMOSOME-SPECIFIC STAINING TO DETECT GENETIC REARRANGEMENTS

**Inventor:** Joe W. Gray/Daniel Pinkel/Doug Tkachuk

**Serial No.:** 537,305

**Filing Date (U.S.):** 12 JUN 90

**Contractor:** The Regents of the University of California

**DOE Contract No.:** W-7405-ENG 48

**DOE Case No.:** S-71,867 (RL-11090)

**Foreign Applications filed in or intended to be filed at Contractor's expense in (countries):**

Possible filings include: EPO, Canada, Japan, Korea & maybe Australia  
The invention identified above is a "subject invention" under the Patent Rights clause and Other Patent Related Matters clause included in the above-identified contract with the Department of Energy.

This document is confirmatory of the paid-up license granted to the Government under this contract in this invention, patent application, and any resulting patent, and of all other rights acquired by the Government by the referenced clauses, a copy of which is attached hereto and incorporated by reference herein.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Signed this 17<sup>th</sup> day of December, 1990.  
(SEAL)

On Behalf of the Regents of the University of California  
(Contractor)

By Howard B. Scheckman  
(Contractor's Official and Title)  
Howard B. Scheckman, Manager  
DOE Laboratory Liaison  
(Business Address)

1320 Harbor Bay Parkway, Suite 150  
Alameda, CA 94501

CLAUSE 31 - PRESERVATION OF INDIVIDUAL OCCUPATIONAL RADIATION EXPOSURE RECORDS

Individual occupational radiation exposure records generated in the performance of work under this contract shall be subject to inspection by the DOE and shall be preserved by the University until disposal is authorized by the DOE, or at the option of the University delivered to the DOE upon completion or termination of the contract. Title to such records shall be in the DOE.

CLAUSE 32 - PATENT RIGHTS

(a) Definitions.

- (1) "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 USC 2321 et seq.).
- (2) "Subject invention" means any invention of the University conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in Section 41(d) of the Plant Variety Protection Act, (7 USC 2401(d)) must also occur during the period of contract performance.
- (3) "Practical application" means to manufacture, in the case of a composition or product; to practice, in the case of a process

or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

- (4) "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (5) "Small Business Firm" means a small business concern as defined at Section 2 of Public Law 85-536 (15 USC 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standard for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8, and in 13 CFR 121.3-12, respectively, will be used.
- (6) "Nonprofit Organization" means a university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a)) or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.
- (7) "Patent Counsel" means the Department of Energy (DOE) Patent Counsel assisting the DOE contracting activity.
- (8) "Exceptional Circumstances" Subject Invention means any subject invention for which DOE provides the exceptional circumstances finding and analysis in writing under Section 35 USC 202(a)(11) and the Procedures of 37 CFR Part 401.3(e).

(b) Allocations of Principal Rights.

- (1) Assignment to the Government. The University agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention, except to the extent that rights are retained by the University under subparagraph (b)(2) and paragraph (d) below.
- (2) Retention by University. Within 2 years after disclosure to DOE, the University may elect in writing to retain title to any subject invention which is not an exceptional circumstance subject invention. However, in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period. The right of the University to elect title to subject inventions is subject to the invention rights disposition in the treaties or international agreements found in Appendix F which is incorporated by reference and made a part of this contract. Where the University elects title in an invention in which DOE has already filed, the University agrees to reimburse patent prosecution costs.
- (3) Filing of Applications. The University will file its initial patent application on a subject invention to which it elects to retain title within one year after election of the title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use, whichever is earlier. The University will file patent applications in additional countries or international patent offices within either 10

months of the corresponding initial patent application or 6 months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

- (4) Treatment of Exceptional Circumstances and Greater Rights. If an invention is not electable the University may request waiver of rights under DOE's regulation patent waiver procedures. DOE shall make a waiver determination within a reasonable time, usually within six months of the waiver request. If DOE is unable to complete its determination within 6 months it will report the status of such determination and will update such status monthly. The University shall use its best efforts to supply sufficient information to DOE to make its determination.
- (5) Government Licenses. With respect to any subject invention in which the University retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.
- (6) Extensions of Time. Requests for extension of time for disclosure, requesting a determination under paragraph (b)(4), election, and filing may at the discretion of DOE, be granted.
- (7) International Agreements, Treaties. The DOE reserves the right to unilaterally amend this contract to identify specific treaties or international agreements entered into or to be entered into by the Government after the effective date of this funding agreement and effectuate those license or other rights which are necessary for the Government to meet its obligations to foreign Governments, their nationals and international organizations under such treaties or international agreements with respect to subject inventions made after the date of the amendment.

(8) Biological Materials - Reserved

(c) Minimum Rights Acquired by the Government.

(1) With respect to each subject invention to which the University retains principal or exclusive rights, the University agrees as follows:

(i) The University hereby grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced each subject invention throughout the world by or on behalf of the Government of the United States (including any Government agency).

(ii) The University agrees that with respect to any subject invention in which it has acquired title, the DOE has the right in accordance with the procedures in FAR 27.304-1(g) to require the University, as assignee, or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the University, assignee, or exclusive licensee refuses such a request, the DOE has the right to grant such a license itself if the DOE determines that--

(A) Such action is necessary because the University or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

- (B) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the University, assignee, or their licensees;
- (C) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the University, assignee, or licensees; or
- (D) Such action is necessary because the agreement required by paragraph (i) of this clause has neither been obtained nor waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(iii) The University agrees to convey to DOE upon written request title to any subject invention.

- (A) If the University fails to disclose or elect title to the subject invention within the times specified in (b) and (e) or elects not to retain title; provided that DOE may only request title within 60 days after learning of the failure of the University to disclose or elect within the specified times.
- (B) In those countries in which the University fails to file patent applications within the times specified in (b)(3) above; provided, however, that if the University has filed a patent application in a country after the times specified in (b)(3) above, but prior to its receipt of the written request of DOE, the University shall continue to retain title in that country.

- (C) In any country in which the University decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.
- (D) The University will notify DOE of any decisions not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.
- (iv) The University agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by the U.S. Department of Energy. The Government has certain rights in the invention".
- (v) The University agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization of a subject invention or on efforts at obtaining such utilization that are being made by the University or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the University, and such other data and information as the agency may reasonably specify. The University also agrees to provide additional reports as may be requested by the



agency in connection with any march-in proceedings undertaken by the agency in accordance with subparagraph (c)(1)(ii) above. To the extent data or information supplied under this subparagraph is considered by the University, its licensee, or assignee to be privileged and confidential and is so marked, the agency agrees that, to the extent permitted by law, it will not disclose such information to persons outside the Government.

(vi) The University agrees, when licensing a subject invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the invention to any party.

(vii) The University agrees to provide for the Government's paid-up license pursuant to subparagraph (c)(1)(i) above in any instrument transferring rights in a subject invention and to provide for the granting of licenses as required by subparagraph (c)(1)(ii) above, and for the reporting of utilization information as required by subparagraph (c)(1)(v) above, whenever the instrument transfers principal or exclusive rights in a subject invention.

(2) Nothing contained in this paragraph (c) shall be deemed to grant to the Government any rights with respect to any invention other than a subject invention.

(d) Minimum Rights to the University.

- (1) The University may reserve upon request a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government obtains title, unless the University fails to disclose the subject invention within the times specified in subparagraph (e)(2) below. The University's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the University is a part and includes the right to grant sublicenses of the same scope to the extent the University was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the University's business to which the invention pertains.
- (2) The University's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in 37 CFR Part 404 and DOE Licensing Regulations. This license will not be revoked in that field of use or the geographical areas in which the University has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the DOE to the extent the University, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
- (3) Before revocation or modification of the license, DOE will furnish the University a written notice of its intention to revoke or modify the license, and the University will be

allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the University) after the notice to show cause why the license should not be revoked or modified. The University has the right to appeal, in accordance with the applicable Regulations in 37 CFR Part 404 and DOE Regulations concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

- (4) When the Government has the right to receive title, and does not elect to secure a patent in a foreign country, the University may elect to retain such rights in any foreign country in which the University elects to secure a patent, subject to the Government's rights in subparagraph (c)(1) above.

(e) Invention Identification, Disclosures, and Reports.

- (1) The University shall establish and maintain active and effective procedures by which the University will use its best efforts to assure that subject inventions are promptly identified and disclosed to University personnel responsible for patent matters within six months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the University shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.

(2) The University shall disclose each subject invention to the Contracting Officer within two months after the inventor discloses it in writing to University personnel responsible for patent matters or, if earlier, within six months after the University becomes aware that a subject invention has been made, but in any event before any on sale, public use, or publication of such invention known to the University. The disclosure to DOE shall be in the form of a written report and shall identify the contract under which the invention was made, and the inventors. It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the University shall promptly notify DOE of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the University.

(3) The University shall furnish the Contracting Officer the following:

(1) Interim reports every 12 months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing subject inventions during that period, and certifying that all subject inventions have been disclosed (or that there are not such inventions) and that the procedures required by subparagraph (e)(1) above have been followed, and listing all subcontracts containing a patent rights clause or certifying that there were no such subcontracts.

(11) A final report, within three months after completion of the contracted work, listing all subject inventions or certifying that there were no such inventions.

- (4) The University agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the University each subject invention made under this contract in order that the University can comply with the disclosure provisions of paragraph (c) above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (e)(2) above.
- (5) The University agrees that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause provided, however, that any such disclosure of a subject invention in which the University has elected to retain title is subject to 35 USC 205.
- (6) It is recognized that during the course of the work under this contract, the University or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the University, patent approval for release or publication shall be secured from Patent Counsel prior to any such release or publication. The Department's response to such requests for approval shall not

be withheld for more than 90 days except in circumstances in which a domestic application must be filed in order to protect foreign patent rights. . In the latter case, the Department shall be granted an additional 180 days within which to respond to the request for approval. The period of 180 days may be extended by mutual agreement of the parties.

(f) Examination of Records Relating to Inventions.

(1) The Contracting Officer or any authorized representative shall, until three years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the University relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether--

(i) Any such inventions are subject inventions;

(ii) The University has established and maintains the procedures required by subparagraphs (e)(1) and (4) of this clause; and

(iii) The University and its inventors have complied with the procedures.

(2) If the Contracting Officer learns of an unreported University invention which the Contracting Officer believes may be a subject invention, the University may be required to disclose the invention to DOE for a determination of ownership rights..

(3) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

(g) Withholding of Payment.

- (1) Any time before final payment under this contract, the Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$50,000 or five percent of the amount of this contract, whichever is less, shall have been set aside if, in the Contracting Officer's opinion, the University fails to--
  - (i) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to subparagraph (e)(1) above;
  - (ii) Disclose any subject invention pursuant to subparagraph (e)(2) above;
  - (iii) Deliver acceptable interim reports pursuant to subparagraph (e)(3)(i) above; or
  - (iv) Provide the information regarding subcontracts pursuant to subparagraph (h)(4) below.
- (2) Such reserve or balance shall be withheld until the Contracting Officer has determined that the University has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.
- (3) Final payment under this contract shall not be made before the University delivers to the Contracting Officer all disclosures of subject inventions required by subparagraph (e)(2) above, and acceptable final report pursuant to subparagraph (e)(3)(ii) above, and all past due confirmatory instruments.

- (4) The Contracting Officer may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government rights.

(h) Subcontracts.

- (1) Unless otherwise authorized or directed by the Contracting Officer the University shall include in any subcontract hereunder having as a purpose the conduct of research development or demonstration:
- (i) The Patent Rights clause of 37 CFR 401.14 in subcontracts with small businesses or nonprofit organizations except for subcontracts subject to exceptional circumstances; and
  - (ii) The Patent Rights clause of 41 CFR 9-9.107-5(a) in all other subcontracts.
- (2) In the event of a refusal by a prospective subcontractor to accept such a clause the University--
- (i) Shall promptly submit a written notice to the Contracting Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and
  - (ii) Shall not proceed with such subcontract without the written authorization of the Contracting Officer.



- (3) In the case of subcontracts at any tier, DOE, subcontractor, and the University agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to those matters covered by this clause.
- (4) The University shall promptly notify the Contracting Officer in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the University shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.
- (i) Preference for United States Industry.

Unless provided otherwise, where the University receives title to any subject invention, neither the University nor any assignee of the University shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by DOE upon a showing by the University or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

- (j) Reserved.

(k) Atomic Energy.

- (1) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the University or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.
- (2) Except as otherwise authorized in writing by the Contracting Officer, the University will obtain patent agreements to effectuate the provisions of subparagraph (k)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(l) Facilities License.

In addition to the rights of the parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the University agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the University, which are owned or controlled by the University, at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which cover articles, materials, or products manufactured at the facility: (1) to practice or to have practiced by or for the Government at the facility, and (2) to transfer such license with the transfer of that facility. The acceptance or exercise by the Government of the aforesaid rights and license shall not prevent the Government at any time from contesting the enforceability, validity or scope of, or title to, any rights or patents herein licensed.

(m) Patent Functions.

- (1) The prosecution of patent applications, the determination of questions of novelty, patentability, prior art searches, and inventorship, as well as other functions of the Patent Attorney, are excluded from the duties of the University without the prior mutual approval in writing of the University and the Contracting Officer or Patent Counsel. It is understood, however, that if the University has the capability, it will use reasonable efforts to aid and support the Patent Counsel in carrying out patent related functions for work arising out of the contract, where requested by the Patent Counsel.
- (2) For those inventions in which the University receives title either by election or waiver of Government rights, the University will normally be expected to prepare and prosecute patent applications at private expense.

(n) Rights Governed by Other Agreements.

Rights to inventions made under agreements other than funding agreements with third parties shall be governed by the appropriate provisions incorporated, with DOE approval, in such agreements, notwithstanding any disposition of rights contained in this Prime Contract. Disposition of rights under any such agreement shall be in accordance with any DOE class waiver (including Work for Others and User class waivers) or individually negotiated waiver which applies to the agreement and shall take precedence over any disposition of rights in this Prime Contract. Where an invention is conceived in the course of work under this Prime Contract, but is later reduced to practice under a Work for Others agreement, rights to such invention shall be governed by the provisions incorporated, with DOE approval, in the Work for Others agreement. Nothing in

this paragraph shall abrogate the rights of third parties under agreements approved by DOE and entered into prior to any such DOE class waiver.

(o) Transfer of Patent Rights to a Successor Contractor. - Reserved

(p) Costs.

Except as otherwise specified in this paragraph, no costs are allowable as direct or indirect costs for the preparation, filing or prosecution of patent applications or the payment of maintenance fees or licensing and marketing costs where the University elects to retain title.

(q) Assignments/Licensees.

(1) The University agrees that rights to a subject invention in the United States may not be assigned without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the University.

(2) The University agrees that it will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give a preference to a small business firm when licensing a subject invention if the University determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the University is also satisfied that the small business

firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the University. However, the University agrees that DOE may review the University's licensing program and decisions regarding small business applicants, and the University will negotiate changes to its licensing policies, procedures, or practices with DOE when the review discloses that the University could take reasonable steps to implement more effectively the requirements of this subparagraph (q)(2).

(r) Royalty Uses and Shares.

- (1) After payment of patenting costs, licensing costs, payments to inventors, and other expenses incidental to the administration of subject inventions, the balance of any royalties or income earned and retained by the University during any fiscal year on subject inventions under this or any successor contract containing the same requirement, up to any amount equal to five percent of the budget of the Laboratory for that fiscal year, shall be used by the University for scientific research, development, and education consistent with the research and development mission and objectives of the Laboratory, including activities that increase the licensing potential of other inventions of the Laboratory. If the balance exceeds five percent, 75 percent of the excess above five percent shall be paid by the University to the Treasury of the United States and the remaining 25 percent shall be used by the University only for the same purposes as described above. To the extent it provides the most effective technology transfer, the licensing of subject inventions shall be administered by University employees on location at the Laboratory.

- (2) The University, as a demonstration of its commitment to the National technology transfer objective, agrees to return net royalties derived from the licensing of intellectual property to the Laboratory.
- (3) Royalties or other income received by the University which are required to be used at the Laboratory pursuant to subparagraph (r)(1) of this clause shall be used for scientific research, development, and educational purposes. Any inventions arising out of such use at the Laboratory will be deemed "subject inventions" under the contract.

The University shall include as a part of its annual Laboratory Institutional Plan or other annual document a plan setting out those uses to which such royalty funds will be applied at the Laboratory and, at the end of the year, a separate accounting for how the funds were actually used. Such uses shall be consistent with the mission and objectives of the Laboratory and shall be subject to DOE review. The funds may be utilized to support cooperative ventures between the University and DOE under the authority of Section 646(a) of the DOE Organization Act and may also be utilized to supplement the Laboratory Director's discretionary funds. However, under no circumstances shall the royalties be used for the augmentation of general DOE program funds. The University's use of the royalties shall be evaluated as part of the annual appraisal process.

In the event of termination or expiration of this contract, any unexpended balance of net royalties received for use at the Laboratory shall be transferred, at DOE's request to a successor Contractor, or in the absence of a successor Contractor, to such other entity designated by DOE. Should the University no longer operate the Laboratory, the University

will transfer title as one package in all patents and patent applications, licenses and rights thereunder which arose at the facility to the successor contractor or Government if the successor contractor or Government agrees to honor all license terms, obligations to inventors, and obligations and liabilities of the University in connection with those patents and patent applications. If the successor contractor or Government refuses to fully honor the foregoing, then the University shall continue with title in the University.

- (4) For inventions in which the University takes sole title, the University shall establish a policy for the sharing of royalties with inventors including Federal employee co-inventors when DOE determines it appropriate.
- (5) Whenever any annual invention awards or annual royalty payments to an inventor exceeds 10 percent of the inventor's annual base salary, the University shall identify all such inventors to the Contracting Officer.

(s) Conflicts of Interest.

Under the terms of this Agreement, the University is authorized to elect to acquire title to certain inventions and, by such elections as well as waivers granted by the Government, has the right to earn royalties for inventions derived from the work hereunder. The University has also proposed and agreed to pay all of the net proceeds of such royalties into a fund to be utilized for further work under this contract under terms and conditions set forth herein.

The parties agree that although such receipt and use of royalties is an appropriate activity hereunder, it is the mutual desire of the parties to assure that the appearance of conflict of interest or questions concerning organizational objectivity are carefully avoided in every aspect of contract work.

To that end, the University has established and implemented a system based upon the California Fair Political Practices Act and University policy which addresses potential conflicts of interest for individual employees in the conduct of research and development activities in which they could have financial interest. A copy of this system will be furnished to the Contracting Officer and shall be maintained on a current basis during the life of the contract.

The University shall also develop and implement a system to assure that in the performance of the work under this contract the University shall address the appearance of conflict of interest by any of its employees in the area in which the University may have a financial interest arising out of the royalty provisions hereof. Such system shall appropriately address the several unique technology transfer aspects of the relationships encountered under this contract including:

- (1) Potential interferences with ongoing DOE projects and programs including:
  - (i) The use of facility and work for others
  - (ii) Non-government funded work
  - (iii) The commercialization of University developed inventions
- (2) The proper notification of the Department as to any licensing of or assignments to other organizational units of the University, and any action taken by the University under these procedures.
- (3) The method by which sponsors of work to be performed hereunder, including the Department, shall be made aware of relevant rights acquired by the University hereunder.



Such procedures shall be submitted to the Contracting Officer for approval.

(t) Liability of the Government.

The University shall include in all license agreements and in any assignment the following clause unless otherwise approved or directed by the Contracting Officer following consultation with DOE Patent Counsel:

"The U.S. Government is neither a party to nor assumes any liability for activities of the University of California in connection with this license."

Further, the University shall not include in any license agreement or assignment any guarantee or requirement which would obligate the Government to pay any costs or create any liability on behalf of the Government.

(u) Educational Awards Subject to 35 USC 212.

The University shall notify the Contracting Officer prior to the placement of any person subject to 35 USC 212 in an area of technology related to Exceptional Circumstances technology, or which is subject to treaties or international agreements as set forth in subparagraphs (b)(2), (b)(4) and (b)(7) of this clause or agreements other than funding agreements. The Contracting Officer shall have the right to disapprove such placement.

(v) Waiver Requested Inventions.

It is agreed that the University may elect to retain title to subject inventions listed in Appendix E which is incorporated by reference and made a part of this contract.

### CLAUSE 33 - PATENT INDEMNITY

Except as otherwise authorized by the Contracting Officer, the University shall obtain indemnification of the Government and its officers, agents, and employees against liability, including costs, for infringement of U.S. Letters Patent (except U.S. Letters Patent issued upon an application which is now or may hereafter be kept secret or otherwise withheld from issue by order of the Government) from the University's subcontractors in accordance with 48 CFR 27.203.

### CLAUSE 34 - AUTHORIZATION AND CONSENT

The Government hereby gives its authorization and consent for all use and manufacture of any invention described in and covered by a patent of the United States in the performance of this contract or any part hereof or any amendment hereto or any subcontracts hereunder (including all lower-tier subcontracts).

In the case of suit or potential of suit in copyright infringement, the University may request authorization and consent in copyright from DOE. Programmatic necessity shall be a major consideration in grant of authorization and consent.

### CLAUSE 35 - NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT

- (a) The University shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the University has knowledge.



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

#6  
**PAT. & T.M. OFFICE  
MAILED**

**JUL 8 1991  
LICENSING & REVIEW**

Assistant General Counsel for Patents GC-42  
U.S. Department of Energy  
1000 Independence Ave., S.W.  
MS 6F-067  
Washington, DC 20585

Dear Sir:

Application S.N. 07/670,242 as filed on March 15, 1991, by Joe W. Gray, et al. and entitled CHROMOSOME-SPECIFIC STAINING TO DETECT GENETIC REARRANGEMENTS includes a clause under 35 U.S.C. 202 indicating that the invention was made under contract no. W-7405-ENG-48 awarded by your agency. You are respectfully requested to inform this Office in writing within 30 days of the date of this letter whether all property rights issues in this application have been resolved, and to which party the patent is eventually to issue. A copy of the face of the file, of the first page of the specification, and of the statement are attached.

Sincerely,

T. H. Tubbesing  
Licensing and Review Examiner  
Special Laws Administration Group  
(703) 308-1685